hour increased at its lowest rate in several years. The 1981 figure of $89.00 represents only a 2.5 percent increase over the year before. In real sales per labor hour, the 1981 figure of $32.98 reversed its steady growth by declining 5 percent from the year before.

Again, it is not surprising to find warehouse, and even limited assortment stores doing so well in this category. Control of labor costs is one of the most important criteria in the success of these stores. Combination stores, those with at least 25 percent general merchandise in the store, registered the lowest sales per labor hour at $74.26.

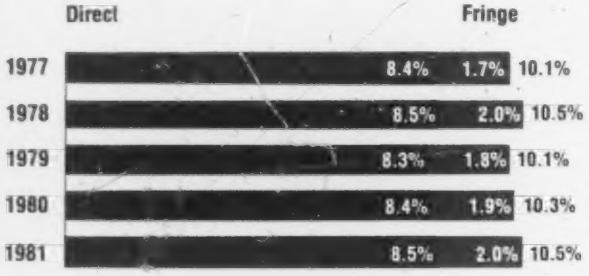
In 1981, the typical food retailer averaged $159,000 in weekly store sales. By type of store, combination stores did the highest average weekly volume, at $203,728. At the lowest end of the spectrum were limited assortment stores, with weekly sales averaging $50,000. Average weekly sales per checkout were $21,707.

In 1981, the average number of items carried was 12,877 items. By store type, combination stores, with their heavy array of non-food items carried an average of 23,000 items, compared to super stores at 14,000 and conventional at 11,000. The rule of thumb for distinguishing these stores is that supers are above 30,000 square feet while conventionals are below that.

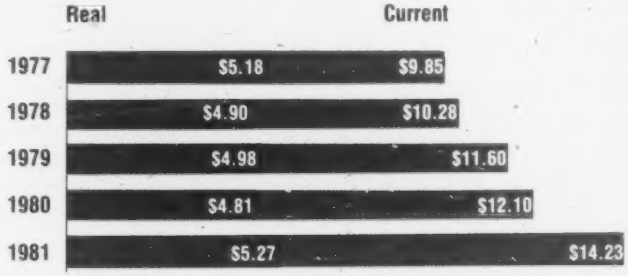
In 1981, the average price of an item carried in the supermarket was $1.19. By type of store, combinations had the highest average price of $1.49, probably due to the variety of merchandise typically carried in these stores. Limited assortment stores had the lowest average item price of $1.01.

In 1981, the aveage size of the typical supermarket was 30,000 square feet. By type of store, conventional stores averaged about 21,700 square feet. Included in this figure are urban stores which tend to be smaller. Warehouse stores averaged 26,000 square feet and combination stores over 47,000 square feet.

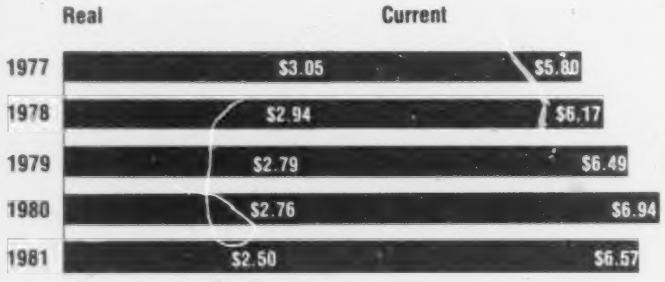
Total Store Labor Cost



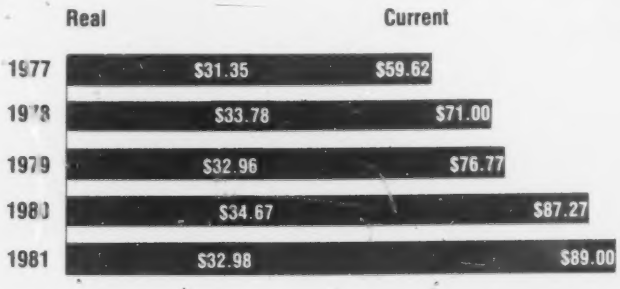
Sale Per Transaction



Sales Per Square Foot



Sales Per Labor Hour



DISTRIBUTION CENTERS

Transportation/Fleets

The majority of trailers, 81 percent, operated by companies are owned by those companies rather than leased. Retailers owned more of their trailers than wholesalers. For tractors, 74 percent were owned by all companies involved. And once again, retailers owned a greater portion of their tractors at 81 percent than did wholesalers at 59 percent.

Within the fleet itself, the typical company's fleet is composed of 79 refrigerated trailers and 107 dry trailers. Among the tractors, the make-up is largely of 3-axles, the typical company using 61. For all the companies, the ratio of trailers to tractors is 2.5.

The typical company employs 102 drivers in an average week. Retailers tended to employ slightly more drivers than did wholesalers. The all-company ratio of full-time drivers to tractors was 1.53. Again, the ratio was higher for retailers than for wholesalers.

Typical Fleet Per Company	
Number of Trailers	
Refrigerated	79
Dry	107
Number of Tractors	
3-Axle	61
2-Axle	19
Ratio of Trailers to Tractors	2.5

The receiving-end of the docks has taken on increased importance in an efficient transportation system. For both retailers and wholesalers, most inbound truck loads are delivered by common carrier. There were two types of deliveries where retailers and wholesalers differed. Retailers received 20 percent of their shipments from contract carriers compared to 15 percent for wholesalers. The other disparity occurred in backhauling. Retailers were receiving only 18 percent of their goods from their own trucks via backhaul, while wholesalers received a quarter of all their goods from their own backhauls.

The good data on shipping was that, in 1981, the average number of miles per truck trip was 141, compared to 118 miles per trip in 1980. The growth of this distance could reflect additional backhauling.

Proportion of Fleet Owned	Total	Retailers	Wholesalers
Trailers	80.8%	85.8%	68.1%
Tractors	74.2%	80.8%	59.1%

The average distance between distribution center and stores served in 1981 was 105 miles. Retailers averaged a distance of 102 miles between distribution center and store, while wholesalers averaged 113 miles. The longest distance between distribution center and stores for all companies were 249 miles. For retailers, the longest distance was 240 miles. For wholesalers the distance was 270 miles.

Dry Grocery Distribution Centers

This year average total area for dry grocery distribution centers was over 230,600 square feet. Distribution centers of wholesalers, at 243,000 square feet, were larger than those of retailers at 229,000 square feet.

Most of the distribution centers, 57 percent, were operating five days a week. But almost a third were operating six days a week. There is also a clear preference on number of shifts per day, with almost half, 47 percent, using two shifts per day. The rest of the companies were fairly evenly divided between one or three shifts per day.

The typical dry distribution center used an average of 80 employees. About 76 percent of the companies said their dry grocery employees were unionized.

The average dry grocery distribution center carried 5,500 items. And, these centers turned their inventory over 16 times a year. Wholesalers, understandably, were processing a great many more orders per week, 493, than were retailers, 168.

Distribution centers receive shipments via rail or truck. The typical dry grocery center received 150 inbound loads by truck per week. These centers usually received about 15 deliveries per week by rail car. Outbound, the average number of vehicle loads per week was 150. In terms of selection methods, the majority of companies, 87 percent, are using manual selection. About 11 percent of the companies are using select to conveyor.

With regard to distribution center productivity, the average number of cases shipped per direct labor hour was 108. The average number of cases stored and replenished per direct labor hour was 316. The average number of cases selected per direct labor hour was 160. The average number of cases repackaged per direct labor hour was 285.

Dry Grocery Distribution Centers	
Average Total Area	
Total Centers	230,643
Retail Centers	229,000
Wholesale Centers	243,000

Refrigerated Distribution Centers

This year FMI collected data for several types of refrigerated distribution centers. Following are results about some of these centers.

Produce

The average total area for produce centers was 32,410 square feet. Distribution centers of wholesalers, at 42,300 square feet, were larger than those of retailers at 31,000 square feet.

The produce distribution centers were fairly well divided on the number of days they operated per week. There seemed to be no preference for operating either a

five or six-day week. There was a clear preference, however, on number of shifts per day. Two-thirds of all produce centers were operating on a two-shift day.

Produce	
Average Number of Items Available	375
Less than 10,000	150
10,000-19,999	250
20,000-39,999	373
40,000-79,999	403
80,000 or More	600

The typical produce distribution center had an average of 18 employees. Size made a great difference in this number. Those centers between 10 and 20,000 square feet typically had 11 employees. Those between 40 and 80,000 had 20 employees, and centers larger than 80,000 square feet averaged out at 70 employees. Just about four-fifths of all produce centers reported had employees who were unionized.

Our typical produce distribution center carried an average of 375 items, while the larger carried 600 items. These distribution centers turned their inventory over 63 times a year. There was not a great difference in turnover for centers between 10 000 and 80,000 square feet.

Produce	
Average Total Area	
Total Centers	32,410
Retail Centers	31,000
Wholesale Centers	42,300
Average Number of Employees	18
Less than 10,000 sq. ft.	8
10,000-19,999	11
20,000-39,999	14
40,000-79,999	20
80,000 or more	70

The typical produce distribution center received 65 truck loads per week and an average of 2 rail car deliveries per week. The typical produce distribution center served 59 supermarkets, shipping about 40,000 cases per week. The number of outbound vehicle loads per week was 89.

Productivity measures for produce centers show that the average number of cases shipped per direct labor hour was 133. Smaller produce centers, below 10,000 square feet, were the most productive. The average number of cases stored and replenished per direct labor hour was 326. The average number of cases selected per direct labor hour was 148.

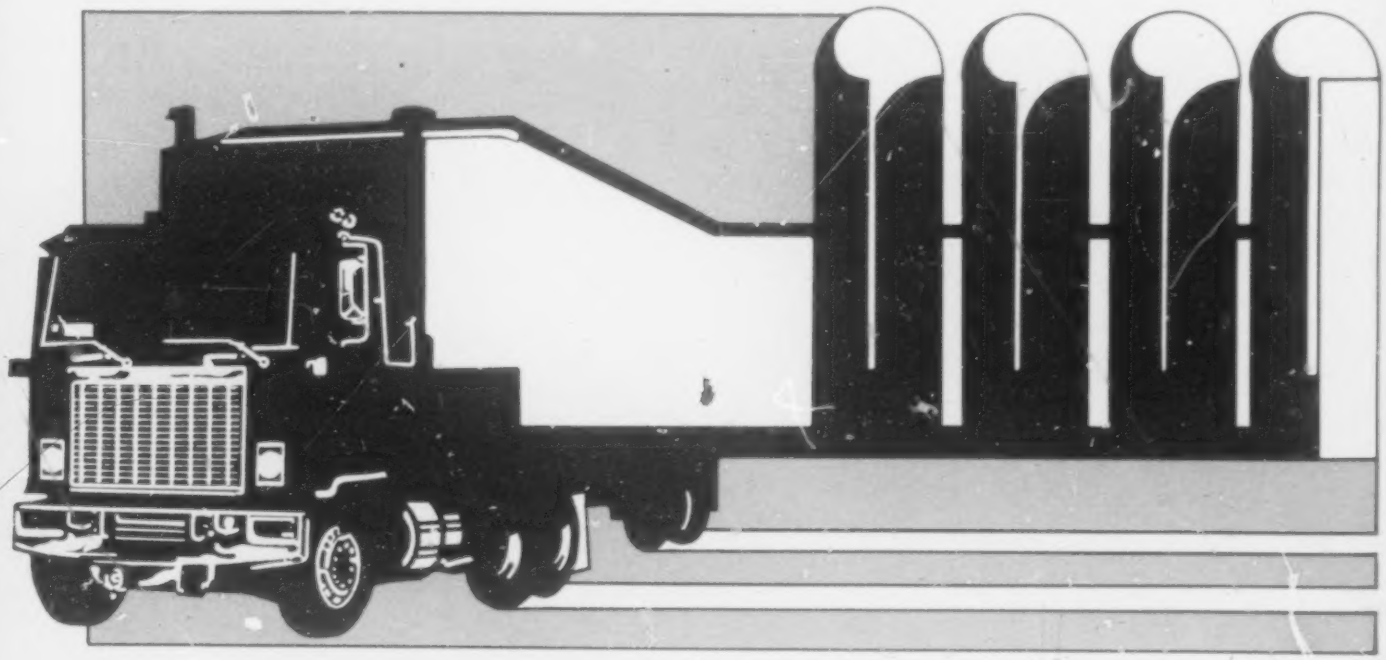
Produce	
Average Number of Inventory Turns	63
Less than 10,000	52
10,000-19,999	65
20,000-39,999	63
40,000-79,999	62
80,000 or more	104

Dairy

The average total area for dairy centers was 10,800 square feet. Distribution centers of retailers, at 13,887 square feet, were larger than those of wholesalers at 10,075 square feet.

The dairy distribution centers showed a clear prefetence on the number of days they operated per week. Sixty percent operated five days a week. There was also a clear choice on number of shifts per day. Here again, 60 percent operated a two-shift day.

The typical dairy distribution center had an average of 5 employees. Just about three-



quarters of all dairy centers reported had employees who were unionized.

Our typical dairy distribution center carried an average of 350 items, while the larger number, 563, were carried by centers between 20,000 and 39,999 square feet in size. These distribution centers turned their inventory over 22 times a year. There was not a great difference in turnover for centers regardless of size.

Dairy	
Average Total Area	
Total Centers	10,800
Retail Centers	13,887
Wholesale Centers	10,075

The typical dairy distribution center received 18 truck loads per week. The typical dairy distribution center served 62 supermarkets, shipping about 20,462 cases per week. Wholesalers processed 210 orders weekly, while retailers processed fewer, at 181.

Productivity measures for dairy centers show that the average number of cases shipped per direct labor hour was 180. The average number of cases stored and replenished per direct labor hour was 316. The average number of cases selected per direct labor hour was 174.

Dairy		
Number of Orders Processed Weekly		
Retail Centers	Wholesale Centers	
181	210	

Meat

The average total area for meat distribution centers was 15,000 square feet. Distribution centers of wholesalers, at 18,200 square feet, were larger than those of retailers, at 15,000 square feet.

The meat distribution centers were almost evenly divided on the number of days operated. Fifty percent operated five day weeks and 43 percent operated six. There is a clear preference on number of shifts per day, with almost three-quarters using two shifts per day. For the rest of the companies, 21 percent chose one shift and 7 percent chose three.

Meat	
Average Number of Cases Shipped per Week	23,800
Average Number of Cases Shipped per Direct Labor Hour	90
Average Number of Cases Selected per Direct Labor Hour	132
Average Number of Cases Stored and Replenish Labor Hour	340

The typical meat distribution center used an average of 8 employees. About 70 percent of the companies said their meat employees were unionized.

The average meat distribution center carried 400 items. And, these centers turned their inventory over 52 times a year. Wholesalers and retailers processed almost an identical number of orders per week. Wholesalers processed 155 orders and retailers, 151.

Although distribution centers can receive shipments via rail and truck, the typical meat center received inbound loads only by truck. The typical center received 32 truck loads per week. Outbound, the average number of vehicle loads per week was 40. In terms of selection methods, the majority of companies, 92 percent, are using manual selection. About 8 percent of the companies are using select to conveyor.

With regard to distribution center productivity, the average number of cases shipped per direct labor hour was 90. The average number of cases stored and replenished per direct labor hour was 340. The average number of cases selected per direct labor hour was 132.

Meat	
Average Number of Inbound Truck Loads per Week	32
Less than 10,000	14
10,000-19,999	30
20,000-39,999	50
40,000-79,999	120

The average number of supermarkets per meat distribution center was 55. The average number of cases shipped per week was 23,800.

Number of Shifts Operated Per Day in Distribution Centers

	All Companies	Wholesale Companies	Retail Companies
Dry Grocery			
One	27%	10%	37%
Two	47%	63%	39%
Three	25%	28%	23%
Dairy			
One	30%	17%	39%
Two	60%	75%	50%
Three	10%	8%	11%
Produce			
One	14%	—	17%
Two	66%	75%	69%
Three	20%	25%	19%
Meat			
One	21%	—	29%
Two	72%	87%	67%
Three	7%	13%	5%

OPERATIONS

Customer Payment Policies

All the companies responding to FMI's survey reported that they accepted personal checks. Virtually all the companies, 92 percent, accepted payroll or government checks.

The majority of companies accepted checks without a purchase. Personal checks without a purchase were accepted by 61 percent of the companies. Payroll or government checks without a purchase were accepted by 67 percent.

Most companies accepted checks over the amount of purchase, but usually with a limit. For personal checks, 84 percent of the companies accepted checks up to a limit above the purchase price, and for personal checks this limit was a median of $20 above the purchase. Although fewer companies, 73 percent, accepted payroll or government checks up to a limit over purchase, this limit is much higher: a median of $300 above the purchase price.

Personal Checks		
Authorized		
In Grocery Lane	70.3%	
At Courtesy Booth	24.0%	
At Bank Terminal	.4%	
Other	5.4%	
Charge for Accepting Checks		
Personal	2%	25¢
Charge for Accepting Checks Over Purchase		
Personal	16%	20¢
Payroll/Government	21%	25¢
Charge for Returned Checks		
Personal	90%	$5.00
Payroll/Government	84%	$5.00

Very few companies charged customers for accepting checks in the amount of purchase. Only 2 percent charged customers for personal checks, and the typical charge was 25 cents.

The number of companies charging customers increases, however, for accepting checks over the purchase. Sixteen percent of the companies charged customers a median amount of 20 cents, for accepting personal checks over the purchase price. For payroll or government checks, 21 percent charged customers for checks over purchase, with the median fee being 25 cents.

Primary Customer Identification Method	
Personal	
Store Courtesy Card	42%
Driver's License	31%
Driver's License/Checker Knows Customer	6%
Checker Knows Customer	5%

Nor surprisingly, most companies charge a fee for returned checks, 90 percent charging a fee for personal returned checks and 84 percent charging for returned payroll or government checks. The median fee for both returned personal payroll and government checks was $5.00.

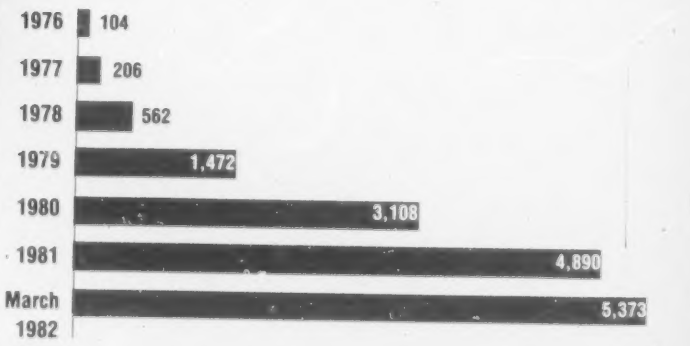
The typical store volume was 2,786 checks per week, with 26 checks returned each week. The numbers work out to a bad-check-return rate of 1 percent. Of the 26 checks returned per week, about 4 of the checks are typically written off as uncollectible by the store. The typical dollar value of the checks was $50. In total, checks represented 60 percent of a store's weekly sales. The dollar value for checks returned was $50.

Authorizing checks is an important part of payment policies. The majority of personal checks, 70 percent, were authorized in the grocery lane. The other primary area for authorization was the courtesy booth. A store courtesy card was used by 42 percent of the stores for customer identification on personal checks. About one-third, or 31 percent, of the stores required a driver's license as well as the primary identification method.

One other form of transaction which is receiving a lot of attention these days is food stamps. Overall, food stamps accounted for 10 percent of the typical company's 1981 sales volume. Thirteen percent of all companies pay their banks a service charge for handling food stamps.

There was a slight increase in credit card acceptance in 1981. The proportion of companies accepting credit cards for payment of grocery items grew from 3 percent in 1980 to 6 percent in 1981. For pharmaceuticals and non-foods, credit card acceptance has grown from 6 percent to 12 percent.

Scanning Installations



Shopping Carts

With productivity so important these days, controlling losses is critical. Although customers may take them for granted, shopping cart losses are an important matter for supermarket operators. The typical food store had 180 shopping carts, with a life expectancy of 6 years. The annual maintenance cost paid by a store for its shopping carts was $1,395. The proportion of a store's shopping carts which are annually lost or vandalized was 12 percent.

Almost three-quarters, or 71 percent, of the stores permitted carts to be taken to the car. Only 4 percent prevented shopping carts from leaving the loading zone, and 25 percent provided for parcel pick-up.

Primary Method for Distributing Groceries	
Parcel Pick Up/Carry Out	*25%*
Cart Remains at Loading Zone	*4%*
Cart Taken to Car	*71%*

Stores which allowed carts to be taken to the car typically had 198 shopping carts. The life expectancy for these carts was 5 years, with maintenance costs of $1,868 per store for all carts. Stores which allowed carts to be taken to the car also had the highest proportion lost or vandalized—14 percent.

Stores which prevented carts from leaving the loading zone fared better. These stores typically had 159 carts, with maintenance costs of $1,544 and a lost or vandalized rate of 7 percent. The life expectancy of carts for these stores was the same as those where carts are taken to the car—5 years.

Shopping Carts	
Average Per Store	*180 carts*
Percent Lost/Vandalized	*12%*
Life Expectancy	*6 years*
Maintenance Cost	*$1395 store*

It should come as no surprise that the stores with the greatest expense control on shopping carts were those with parcel pick-up, although there was undoubtedly a trade-off on labor expense. These stores typically had 138 carts with a life expectancy of 7 years. Their maintenance costs were by far the lowest, at $669 per year. They also had fewer carts lost or vandalized, 5 percent

Electronic Games

Supermarkets have joined in the public preoccupation with electronic games. Companies indicated that 28 percent of their stores had at least one electronic game. Supermarkets projected that they would have games installed in 38 percent of their stores by the end of 1982. Most of the stores had 2 electronic games in each store. Typically, a store received revenue of $143 a week per game.

There seemed to be very few difficulties with the games. Only one percent of all the games installed were removed. In fact 83 percent of the companies surveyed said they didn't have any problems. Of the difficulties which were experienced, 10 percent said it caused a problem with players loitering, while 6 percent said it caused general disruption. Poor service, equipment repairs, and increased pilferage were cited only minimally as difficulties.

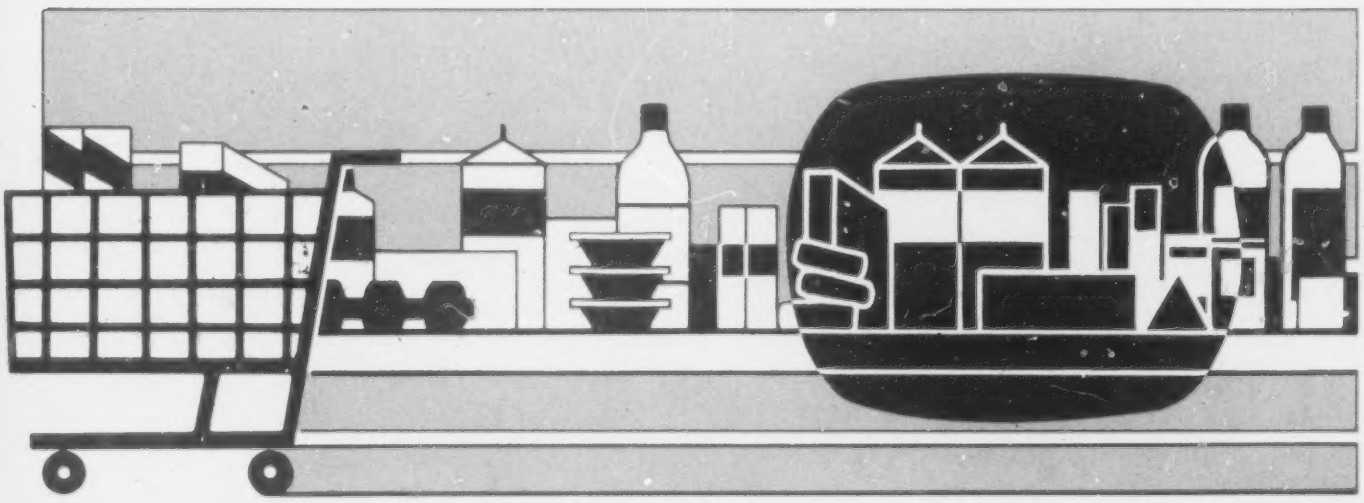
Scanning

The number of scanning installations increased by over 2,000 in the last year. As of March this year, there were over 5300 scanning installations. Among the vendors, NCR leads the pack in installations at 38 percent, with IBM and Datachecker in second and third place.

At the end of 1981, 14.5 percent of all the companies indicated they were 100 percent scanning. By store count, scanning should be at 20 percent of the supermarket population by summer 1982.

As the number of scanning installations increases, it is more and more interesting to see what companies are doing with this information. First of all, 75 percent of the companies responding indicated they employed at least one person with specific responsibility for analysis of scanning data. Most of the companies, 94 percent, used scanning for checker performance. Almost three-quarters, 73 percent, used scanning for coupon accounting. Around two-thirds put scanning to work on coupon acccounting and tracking specials. And one important addition, 40 percent of the companies evaluated new product performance through scanning.

Scanning has become entrenched as a tool for improving productivity at the front end. But the industry still has work ahead if it is going to make other needed improvements in productivity. Improving efficiency is the best way to weather the type of economic fluctuations the industry has been experiencing. But overall, the industry remains a healthy and dynamic one.



STORE DEVELOPMENT

For 1981, FMI developed several new areas of information in store development. This chapter presents the highlights of these results.

Existing Stores

The average age of the typical supermarket was 11.5 years. The oldest stores were conventionals, 12 years, and the youngest were limited assortment, under 3 years. Super stores and warehouse stores were similar in age, approximately 6 years for both. Combination stores averaged 4 years.

The responding companies were asked whether their supermarkets were owned or leased. Twenty percent of all supermarkets are owned. Three regions reported over 40 percent of their supermarkets owned; the northeast, the west north central, and the west south central. Canada reported very few owned stores, 6 percent.

New Stores

The pace of store openings increased a bit from 1980. In 1981, there were 4.7 percent stores newly opened.

In the new store category it was found that the majority of supermarkets built in 1981 were super stores, 54 percent. Tied for second place were conventionals, 23 percent, and combination, 20 percent. In closings, no other type came close to conventionals. Ninety percent of all stores closed in 1981 were conventionals, six percent were super stores and 3 percent were limited assortment stores.

Companies reported that the average number of months from store openings until the supermarket reaches breakeven is 12 months. In size, the typical new store was 34,000 square feet and had aisles averaging 6.5 feet in width. The percentage of selling space to the total area was 74 percent.

In constructing a new supermarket in 1981, the retail company needed about $54 per square foot. Over $30 of this cost was for the actual building and $20 went for fixtures, equipment and decorations.

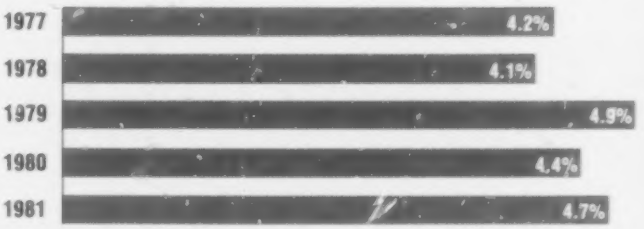
Closings

The percentage of store closings last year was 5.5 percent, equal to the 1976 level.

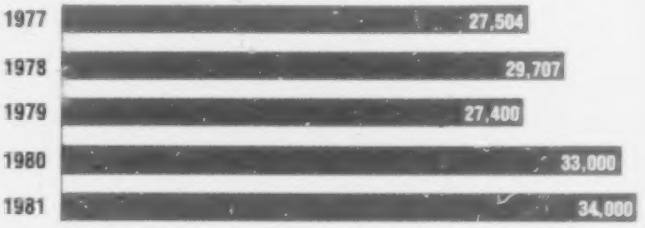
Remodels

Companies reported six percent of their stores were remodeled in 1981. Data showed the typical store underwent a major remodel 10 years after being built or seven years from the last major remodeling. The average total capital invested for remodels was $305,000, up slightly from 1980. By square footage, the average investment was $14 per square foot.

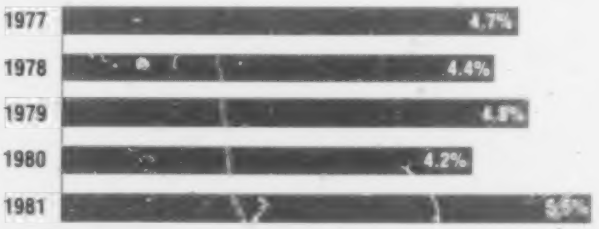
New Stores Opened



New Store Total Area In Square Feet



Stores Closed



About the Study

This year's report is the result of food marketing companies participation in several FMI surveys, *Retail Operation Distribution Center Operations, Customer Payment Policies, Operations Review* and *Facts about Store Development*. In 1982, nonmembers as well as members were invited to provide company data in many of the surveys. The sample description for three of these questionnaires are presented on the opposite page. These numbers represent information from approximately twenty percent of the companies invited to participate.

All averages shown in this report are median figures, except where noted. Medians provide a better industry average because the figures are not subject to distortion by unusual extremes. This is very important when a few companies differ very significantly from the marketing average.

When measuring real growth in retail sales and productivity, *Speaks* uses the CPI food-at-home index as a deflator. The table below charts this deflator.

In this report, FMI defines a supermarket as a retail food store with annual sales of at least $2 million. This report is a summary of key findings of the surveys. Some, however, may have the need for more detailed facts and figures. The supporting tables for this report are found in the companion report entitled *Detailed Tabulations from the Food Marketing Industry Speaks, 1982* and in *Facts about Store Development*.

Index For Deflating Annual Supermarket Sales

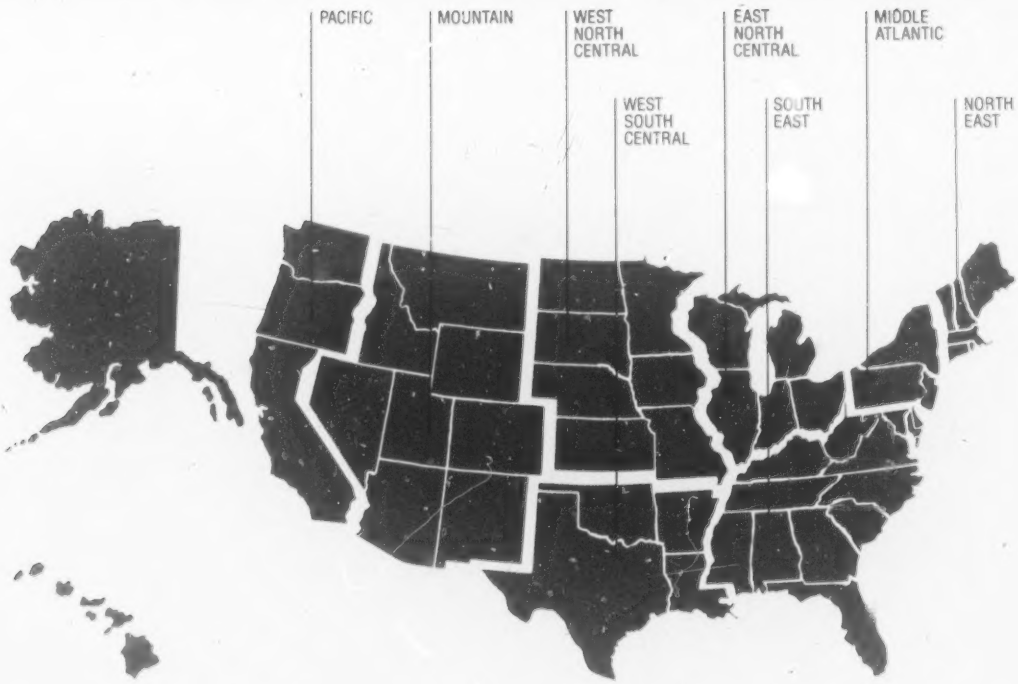
	CPI Food at Home	% Increase
1974	162.4	14.9
1975	175.8	8.3
1976	179.5	2.4
1977	190.2	6.0
1978	210.2	10.5
1979	232.9	10.8
1980	251.5	8.0
1981	269.9	7.3

APPENDIX

Trends in Operating Results

	1977	1978	1979	1980	1981
Gross Profit with Warehouse	22.0%	22.6%	22.3%	22.4%	23.0%
Gross Profit Without Warehouse	19.7%	21.0%	20.5%	20.9%	20.9%
Sales Per Labor Hour	$59.62	$71.00	$76.77	$87.27	$89.00
Sales Per Square Foot	$ 5.80	$ 6.17	$ 6.49	$ 6.94	$ 6.75
Sale Per Customer Transaction	$ 9.85	$10.28	$11.60	$12.10	$14.23
Average Hourly Labor Cost*	$ 4.91	$ 5.36	$ 5.92	$ 6.57	$ 7.64
Store Labor Expense	8.4%	8.5%	8.3%	8.4%	8.5%
Fringe Benefit Expense	1.7%	2.0%	1.8%	1.9%	2.0%
Grocery Department Shrink	0.5%	0.5%	0.6%	0.5%	0.5%
Net Profit (before taxes)	1.4%	1.7%	1.9%	1.5%	1.4%

*Excluding fringe benefits



Sample Description For *Food Marketing Industry Speaks*

Retail Operations Questionnaire

(Base) Company Retail Sales (millions)	Sample Companies (261)
Under $10	30.6%
$10-$30	25.7%
$31-$100	26.4%
$101-$250	6.2%
$251-$500	6.5%
Over $500	4.6%
	100.0%

Distribution Center Operations Questionnaire (Base) Company Sales (millions)	Sample Wholesale Companies (25)	Sample Retail Companies (61)
Under $30	4.0%	0.0%
$31-$100	20.0%	18.0%
$101-$250	20.0%	16.4%
$251-$500	28.0%	24.6%
Over $500	28.0%	41.0%
	100.0%	100.0%

Customer Payment Policies Questionnaire

(Base) Company Retail Sales (millions)	Sample Companies (288)
Under $10	37.6%
$10-$30	20.6%
$31-$100	17.8%
$101-$250	6.6%
$251-$500	10.1%
Over $500	7.3%
	100.0%

The Food Marketing Institute (FMI) is a non-profit association that conducts programs in research, education and public affairs on behalf of its 1100 members—food wholesalers and retailers and their customers in the United States and overseas. FMI's domestic member companies operate over 17,000 retail food stores with a combined annual sales volume of $120 billion—half of all grocery sales in the United States. More than two-thirds of FMI's membership is comprised of independent supermarket operators or small regional firms. Its international membership includes more than 100 members from 37 nations.

The FOOD MARKETING INDUSTRY SPEAKS 1982

DETAILED TABULATIONS

Price:

Food Marketing Industry Speaks, 1982
FMI Members: $7.50
Nonmembers: $15.00

Food Marketing Industry Speaks, 1982 and
Detailed Tabulations from the Food Marketing
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